EVOLUTIVE SENSORS

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User manual PLUV2 250W

color : Green, Red and White

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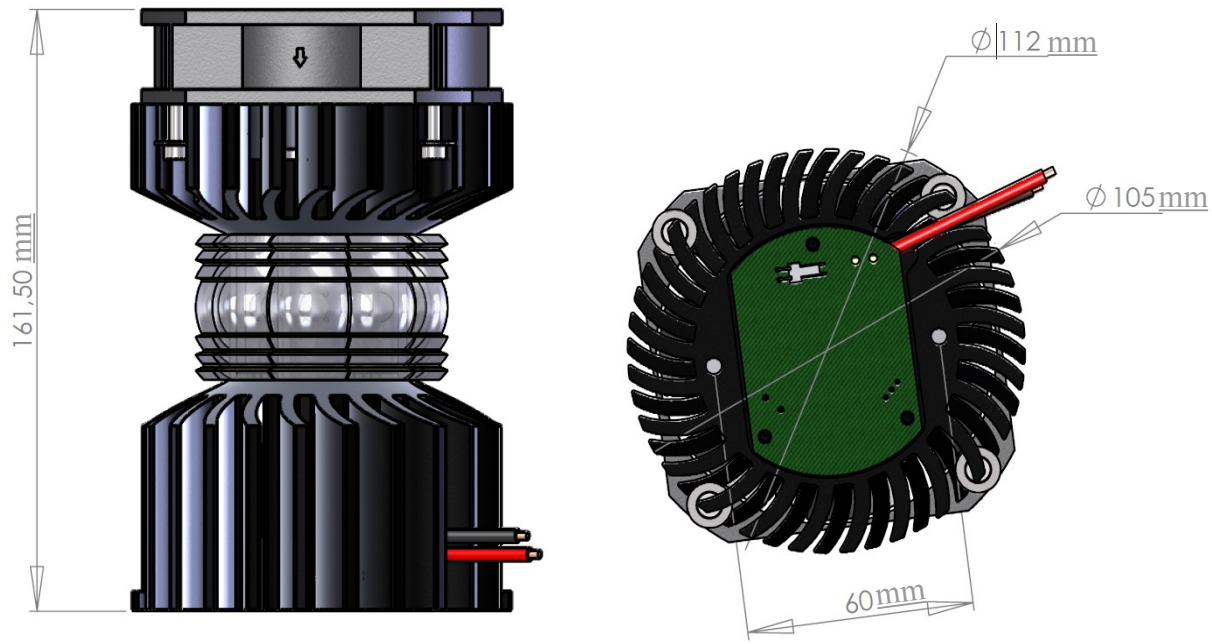
1 Description

The lighting LEDs source PLUV2_250W_W, G or R is a white, green or red lighting device with a maximum power of 250W electrical watt. It was designed to replace metal-halide bulbs upto 180W. Indeed its emitting pattern is +/-3% uniform over 360° azimuth and +/- 25° of vertical divergence. This source is well adapted to maritime lanterns of more than 5 nautical miles range.

2 Specifications

2.1 Mechanical dimensions



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2.2 Technical data

Parameters	Specifications
Luminous flux	>12000 lumen
Power supply	20 to 40 Volts DC ; 12.5A max ; 250W max
Dimensions	Ø 105mm, height 161.50 mm
Colors	Green 520nm, Red 620nm, White 4500K
Life time	> 50 000 hours
Rise time	<10ms
Angular divergence	+/-25°
Point source size, position	12 mm, on the central axis
Dimming levels	4 pre-selected in factory

Inverse polarity protection on input power connection

3 Recommendations

3.1 Cabling

The source must be connected to DC power supply with **a voltage between 20 and 40V, capable of draining 250W.**

The power connection is a Faston 6.4 mm. The lamp comes with a male tab terminal and a female terminal. Red one should be connected to VCC, and the blue one to Ground.

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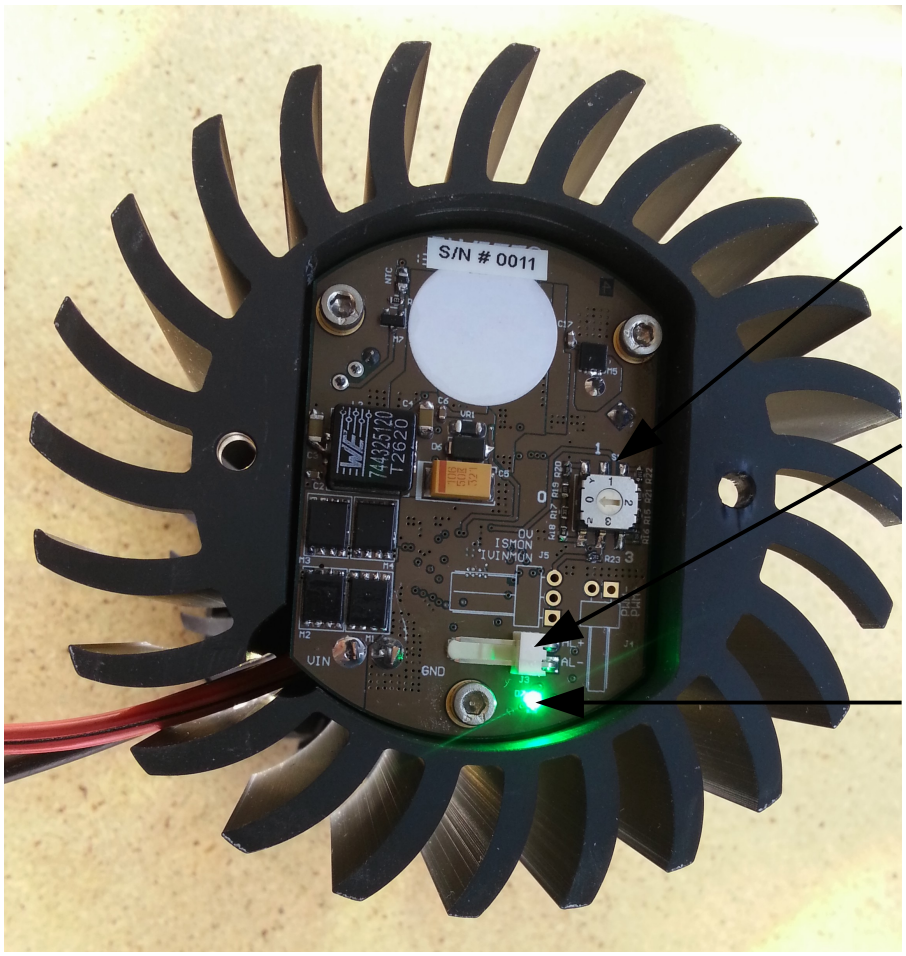

S/N # 0011
Switch S1 : Setting the brightness level from 0 (min) to 3 (max)
Connector J3 : alarm output
Operating indicator :
Green = OK, OFF = Alarm

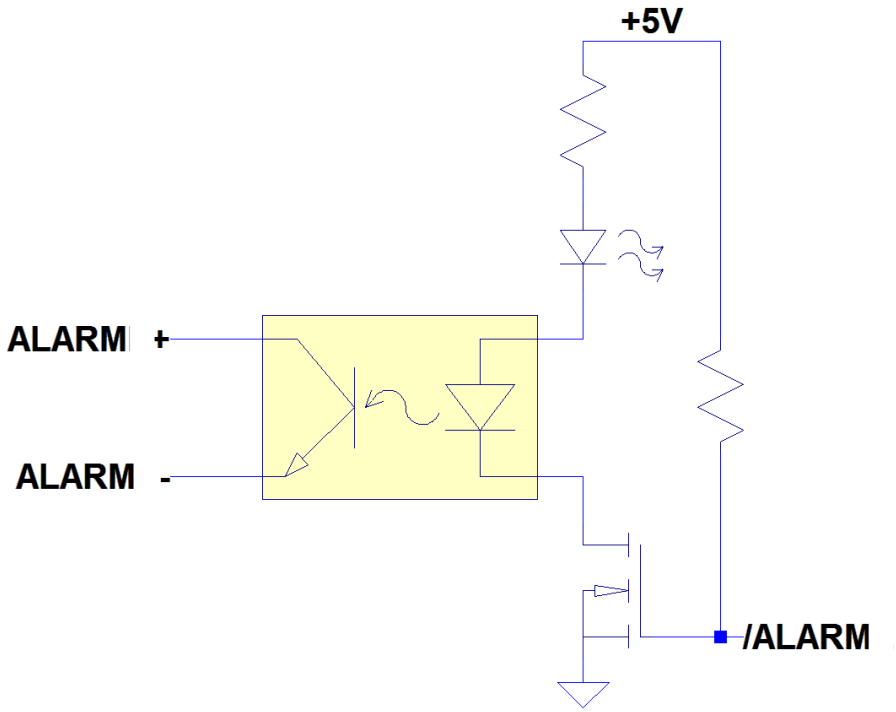
3.2 Operating

Caution: the heat sink of the device can reach 75 degrees Celsius in a closed environment.

A green light is visible on the electronic driver under the lamp, which indicates proper operation. If it is off, the lamp is in a fault state. The reasons of failure could be:

1. Electronics overheating
2. LED short cut
3. LED circuit open

J3 connector is an alarm for failure monitoring. The electrical schematic of the output is shown below.



The output power is selected by S1 switch position:

0 = 35 W (factory set to customer's request)

1 = 80 W (factory set to customer's request)

2 = 190 W (factory set to customer's request)

3 = 240 W (factory set to customer's request)

3.3 Options

The PLUV2 LED source is switchable thanks to an enable input J4.

Monitoring the LEDs current is available on request.